

- 70 -

CLAIMS

1. A water-soluble or dispersible, non-hydrolysable polysaccharide (NHP), having at least one first polymeric textile benefit species bonded thereto by a hydrolytically stable bond.
2. A composition according to claim 1 wherein the first polymeric textile benefit species is a first polymeric textile softening species (FPSS).
3. A composition according to claim 2 wherein the bond between the FPSS and the polysaccharide is such that the decay rate constant (k_d) of the material in an aqueous solution at 0.01 wt% of the material together with 0.1 wt% of anionic surfactant at a temperature of 40°C at a pH of 10.5 is such that $k_d < 10^{-3} s^{-1}$.
4. A composition according to any of claims 1-3 wherein the NHP has a backbone comprising β 1-4 linkages.
5. A composition according to claim 4 wherein the NHP is a poly-glucan, poly-mannan, gluco-mannan or a mixture thereof.
6. A composition according to claim 5 wherein the NHP is a galacto-mannan, xylo-glucan or a mixture thereof.

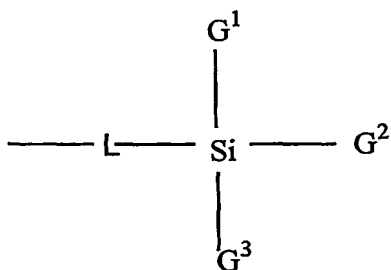
- 71 -

7. A composition according to claim 6 wherein the NHP is locust bean gum, tamarind xyloglucan, guar gum or mixture thereof.
8. A composition according to any of the claims 2-7 wherein first polymeric textile softening species (FPSS) is a silicone.
9. A composition according to any of claims 2-8 in combination with a second textile benefit species which is not covalently bonded thereto.
10. A composition according to claim 9 wherein the second textile benefit species is a second polymeric textile softening species (SPSS).
11. A composition according to claim 10 wherein the SPSS is a silicone.
12. A composition according to claim 11 wherein the SPSS has a dynamic viscosity of $>2,500$ mPas.
13. A composition according to claim 10 wherein the ratio of the NHP with the FPSS bonded thereto to the SPSS is in the range 1:100 to 1:5 parts by weight, preferably 1:20-1:10 parts by weight.
14. A composition as claimed in claim 11 comprising NHP with FPSS bonded thereto, and optionally SPSS, as the dispersed phase of an emulsion.

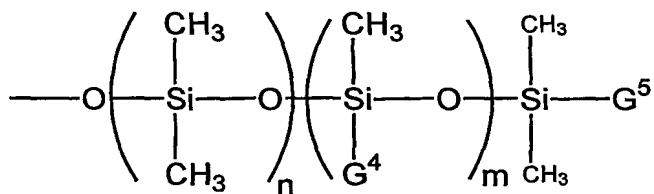
- 72 -

15. A composition as claimed in claim 14 further comprising an emulsifying agent.
16. A composition as claimed in claim 15 wherein the emulsifying agent comprises a non-ionic surfactant.
17. A composition as claimed in any of claims 14-16 wherein the emulsion is 30 to 99.9%, preferably 40 to 99% of another liquid component, preferably a polar solvent, most preferably water.
18. A composition as claimed in any of claims 2-17 wherein the FPSS is a silicone selected from polydialkyl siloxanes, amine derivatives thereof, and mixtures thereof.
19. A composition as claimed in claim 18, wherein the silicone chain(s) on the substituted polysaccharide have an average degree of substitution of from 0.001 to 0.5, preferably 0.01 to 0.5, more preferably from 0.01 to 0.1, even more preferably from 0.01 to 0.05.
20. A composition as claimed in claim 18, wherein the silicone chain(s) in the substituted polysaccharide is or are independently selected from those of formula:

- 73 -



wherein L is absent or is a linking group and one or two of substituents G^1 - G^3 is a methyl group, the remainder being selected from groups of formula



the $\text{---Si(CH}_3)_2\text{O---}$ groups and the $\text{---Si(CH}_3\text{O)(G}^4\text{)---}$ groups being arranged in random or block fashion, but preferably random.

wherein n is from 5 to 1000, preferably from 10 to 200 and m is from 0 to 100, preferably from 0 to 20, for example from 1 to 20.

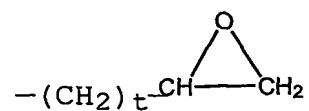
G^4 is selected from groups of formula:

$\text{---(CH}_2\text{)}_p\text{---CH}_3$, where p is from 1 to 18

$\text{---(CH}_2\text{)}_q\text{---NH---(CH}_2\text{)}_r\text{---NH}_2$ where q and r are independently from 1 to 3

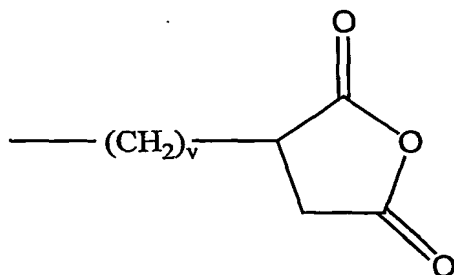
- 74 -

$-(\text{CH}_2)_s\text{NH}_2$, where s is from 1 to 3



where t is from 1 to 3

$-(\text{CH}_2)_u\text{COOH}$, where u is from 1 to 10,



where v is from 1 to 10, and

$-(\text{CH}_2\text{CH}_2\text{O})_w(\text{CH}_2)_x\text{H}$, where w is from 1 to 150,
preferably from 10 to 20 and x is from 0 to 10;

and G^5 is independently selected from hydrogen, groups defined above for G^4 , $-\text{OH}$, $-\text{CH}_3$ and $-\text{C}(\text{CH}_3)_3$.

- 75 -

21. A composition as claimed in claim 20, where L is selected from amide linkages, ester linkages, ether linkages, urethane linkages, triazine linkages, carbonate linkages, amine linkages and ester-alkylene linkages.
22. A laundry treatment composition comprising a composition as claimed in any preceding claim and at least one further component.
23. A laundry treatment composition as claimed in claim 22, wherein the further component comprises a surfactant.
24. Use of a composition as claimed in any preceding claim to enhance the softening benefit of a laundry treatment composition on a substrate.
25. A laundry treatment composition comprising: 1-60%wt of a surfactant, and 0.001-25%wt of an emulsion comprising (a) a water-soluble or dispersible, non-hydrolysable polysaccharide selected from the group consisting of poly-glucan, poly-mannan, gluco-mannan and mixtures thereof, said polysaccharide being covalently linked by a hydrolytically stable bond to a first polymeric textile softening species, and (b) a second polymeric textile softening species.
26. A laundry treatment composition according to claim 25 wherein the first and second polymeric textile softening species are silicones.